

**C. Amendments to the Claims:**

This listing of the claims replaces all prior versions of the claims in the application:

**Listing of the Claims:**

1. (currently amended) A method for transplantation of at least about 500,000 mitogenic growth factor-responsive neural stem cells capable of differentiating into neurons, oligodendrocytes, or astrocytes to the a brain of a living host subject, wherein the cells
  - (a) are transplanted to a first locus of the brain of a living host subject;
  - (b) migrate in vivo after implantation from the first locus to other anatomic sites for integration within the nervous system of the host subject from the first locus toward a second locus following infusion of a mitogenic growth factor that does not induce differentiation of the neural stem cells at a the second locus of the brain of said host subject;
    - (c) integrate in situ after implantation into the parenchymal tissues at a local anatomic site in the host subject;
    - (d) (c) are capable of differentiate differentiating in situ after integration into a cell selected from the group consisting of neurons, oligodendrocytes, and astrocytes following migration to the second locus; and
    - (d) wherein the transplanted neural stem cells retain their in vivo responsiveness to the mitogenic growth factor.
2. (previously presented) The method of claim 1, wherein said neural stem cells are mammalian embryonic neural stem cells.
3. (previously presented) The method of claim 1, wherein said first locus is in the striatum of the brain and wherein said second locus is in the lateral ventricle of the brain.
4. (canceled)
5. (canceled)

6. (previously presented) The method of claim 1, wherein said neural stem cells are cultured in media comprising the mitogenic growth factor prior to transplantation.

7-12. (canceled)

13. (previously presented) The method of claim 6, wherein said culture is a suspension culture.

14. (previously presented) The method of claim 6, wherein said culture is an adherent culture.